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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,378	12/23/2004	Juliette Harrington		4880
7590	07/26/2006		EXAMINER	
Juliette Harrington 63 Boulder View Lane Boulder, CO 80304				NGUYEN, HOANG M
		ART UNIT	PAPER NUMBER	3748

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/519,378	HARRINGTON, JULIETTE
	Examiner Hoang M. Nguyen	Art Unit 3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-25 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-25 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachments(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

Claims 7-9 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim 3. See MPEP § 608.01(n). Accordingly, the claims 7-9 have not been further treated on the merits.

Claims 14, 16, 18-20, 21-23, 24, 25, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 14, 16, 18-20, seem to be dependent from wrong claims; the scopes of these claims suggest they should be dependent from claim 12 instead.

Claims 24-25 are improper. Please note **MPEP 2173.05(s) Reference to Figures or Tables. Where possible, claims are to be complete in themselves. Incorporation by reference to a specific figure or table “is permitted only in exceptional circumstances where there is no practical way to define the invention in words and where it is more concise to incorporate by reference than duplicating a drawing or table into the claim. Incorporation by reference is a necessity doctrine, not for applicant’s convenience.”** Ex parte Fressola, 27 USPQ2d 1608, 1609 (Bd. Pat. App. & Inter. 1993) (citations omitted). Reference characters corresponding to elements recited in the detailed description and the drawings may be used in conjunction with the recitation of the same element or group of elements in the claims. See MPEP § 608.01(m).

In claim 21, the phrase "parabolic mirror" does not have a clear antecedent basis.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21, 22, 24-25, are rejected under 35 U.S.C. 102(b) as being anticipated by US 6384320 (Chen).

Regarding claim 21, Chen discloses a solar system comprising a planar solar collector (Fresnel lens 12) and a compound parabolic solar concentrator 14.

Regarding claim 22, the Fresnel lens 12 is clearly static relative to the solar concentrator 14.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 10-11, 14, 16, 18-20, are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 6384320 (Chen) in view of U.S. 4388542 (Lee et al). Chen discloses all the claimed subject matter as set forth above in the rejection of claim 1, but does not disclose a solar oven in combination with a MHD system. Lee et al discloses it's well known to use a solar concentrator 32-34 to generate heat in a solar oven 36 of a MHD system comprising a compressor 49, radiator 48, regenerative heat exchanger 47. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize concentrator in Chen to drive a MHD system having a solar oven as taught by Lee et al for the purpose of generating appropriate power output based on said MDH system. Regarding claims 14, 16, 18-20, it would have been

obvious to use different types of concentrator, seeding material, and more than one concentrator for the purpose of generating appropriate power outputs.

Claim 6 is rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 6384320 (Chen) in view of U.S. 4388542 (Lee et al) and US 5431742 (Kleinerman). Chen as modified by Lee et al discloses all the claimed subject matter as set forth above in the rejection of claim 1, but does not disclose luminescent dopant. Kleinerman discloses it's well known to use luminescent solar concentrator, which is using fluorescent dyes (column 4, lines 46-60). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize the luminescent concentrator in Chen as taught by Kleinerman for the purpose of generating appropriate power input based on said luminescent concentrator.

Claims 12-13, 14, 15, 17, are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 6384320 (Chen) in view of U.S. 4388542 (Lee et al) and US 3524086 (Lindley). Chen as modified by Lee et al discloses all the claimed subject matter as set forth above in the rejection of claim 1, but does not disclose seeding materials. Lindley discloses it's well known to use seeding materials with seed separator 5, compressor 4 and other basis elements in a MHD system. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize the seeding materials with all basis elements in Chen as taught by Lindley for the purpose of generating appropriate power input based on said seeding materials.

Regarding claims 12-13, it would have been obvious to select the specific seeding materials as claimed in Chen for the purpose of generating appropriate power input based on the characteristics of said seeding materials.

Claim 23 is rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 6384320 (Chen) in view of US 4496787 (Touchais et al). Chen discloses all the claimed subject matter as set forth above in the rejection of claim 1, but does not disclose a parabolic mirror connecting the planar solar collector with the compound solar concentrator. Touchais et al discloses it's well known to use a parabolic mirror 2 connecting a planar solar collector 1 with another concentrator 4. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize a parabolic mirror in Chen as taught by Touchais et al for the purpose of avoiding heat loss due to the use of parabolic mirror.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yoge et al, and Moriarty disclose solar energy system using compound concentrators.

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Nguyen whose telephone number is (571) 272-4861. The examiner can normally be reached on Tuesday--Friday from 12:30 AM to 10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



07/17/06

HOANG NGUYEN  
PRIMARY EXAMINER  
ART UNIT 3748

Hoang Minh Nguyen  
7/17/2006